



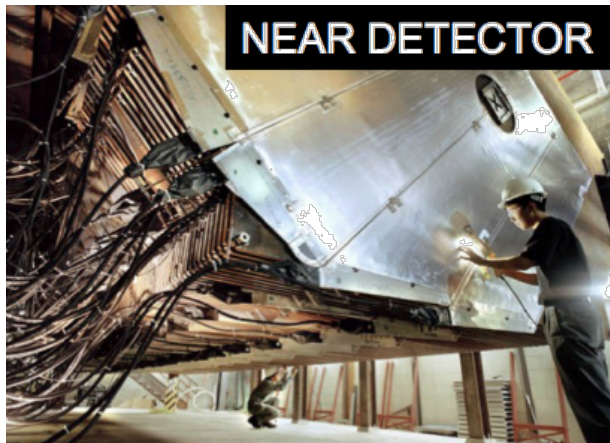
# MINOS+ Status Report



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All Experimenters' Meeting  
April 20, 2015



# Near Detector



## DAQ news

- DAQ has been running well all week

## Electronics/Detector news

- Quiet week
- One intermittent warm channel: we will replace the Minder board during tomorrow's beam downtime
- Some lingering effects from last's weekend Minder crates issues are causing a lower overall LiveTime



# Far Detector



## DAQ news

- DAQ has been running well this past week
- One failure on Sunday morning at 5:42 am
  - the on-call expert did not notice and the DAQ was recovered at 7:30 by another expert
  - A bit lower LiveTime
- Soudan is doing official shadowing shifts this week to be certified as ROC site

## Electronics/Detector news

- One intermitted CI low gain channel (one pixel)
- CI Special runs taken during occasional beam downtimes
- During tomorrow's beam downtime crew will replace the DAQ racks' UPS unit



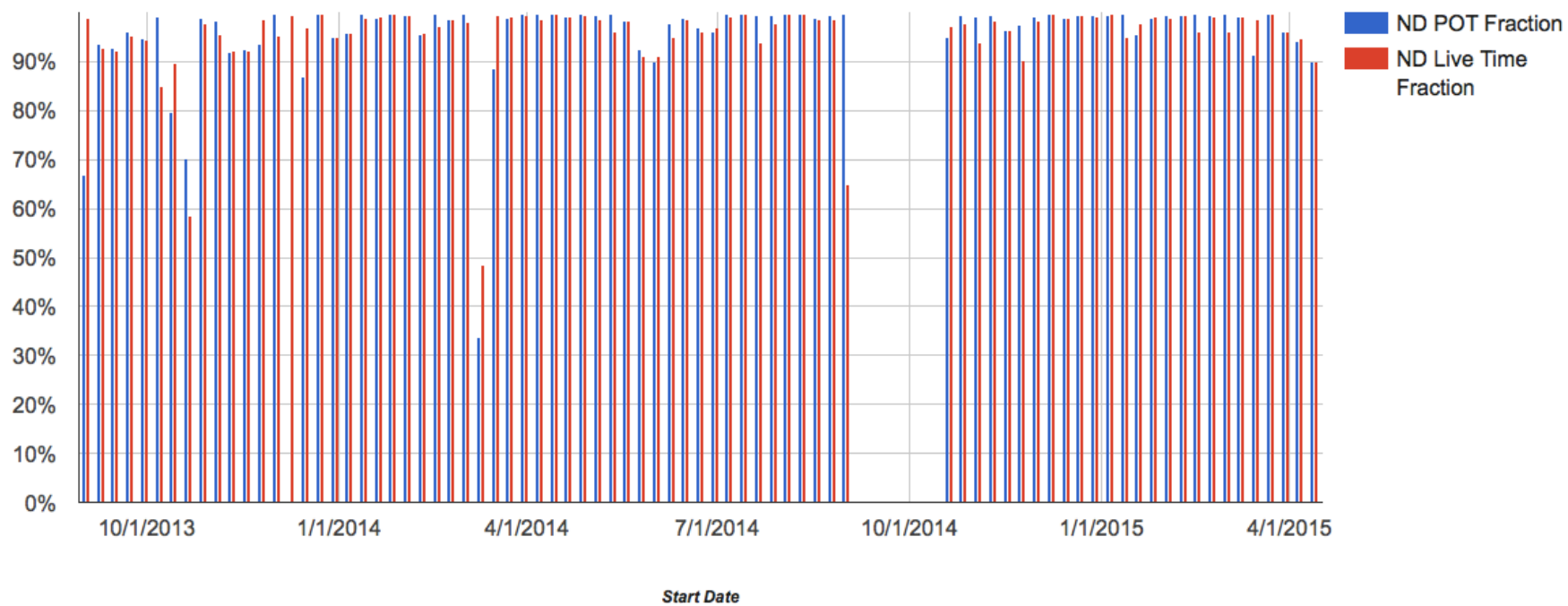
# MINOS+ Status



Start Date/Time	End Date/Time	Near Detector		Far Detector	
		POT Fraction	Live Time Fraction	POT Fraction	Live Time Fraction
12/29/2014 00:00:00	1/05/2015 00:00:00	99.4%	99.1%	99.3%	98.2%
1/05/2015 00:00:00	1/12/2015 00:00:00	99.5%	99.6%	98.5%	98.6%
1/12/2015 00:00:00	1/19/2015 00:00:00	99.7%	95.0%	99.8%	98.8%
1/19/2015 00:00:00	1/26/2015 00:00:00	95.6%	97.7%	95.8%	93.7%
1/26/2015 00:00:00	2/02/2015 00:00:00	99%	99.3%	99.4%	99.7%
2/02/2015 00:00:00	2/09/2015 00:00:00	99.4%	98.8%	99.8%	99.6%
2/09/2015 00:00:0	2/16/2015 00:00:00	99.4%	99.5%	98.4%	98.4%
2/16/2015 00:00:00	2/23/2015 00:00:00	99.6%	96.2%	99.7%	98.3%
2/23/2015 00:00:00	3/2/2015 00:00:00	99.4%	99.3%	99.6%	99.1%
03/2/2015 00:00:00	3/9/2015 00:00:00	99.6%	96.2%	99.8%	94.7%
3/9/2015 00:00:00	3/16/2015 00:00:00	99.2%	99.2%	99.8%	98.6%
3/16/2015 00:00:00	3/23/2015 00:00:00	91.3%	98.7%	91.1%	92.3%
3/23/2015 00:00:00	3/30/2015 00:00:00	99.6%	99.6%	99.4%	99.1%
3/30/2015 00:00:00	4/6/2015 00:00:00	96.2%	96.1%	99.9%	99.6%
4/6/2015 00:00:00	4/13/2015 00:00:00	94%	95%	99.9%	99.6%
4/13/2015 00:00:00	4/20/2015 00:00:00	90%	90%	98.7%	98.4%

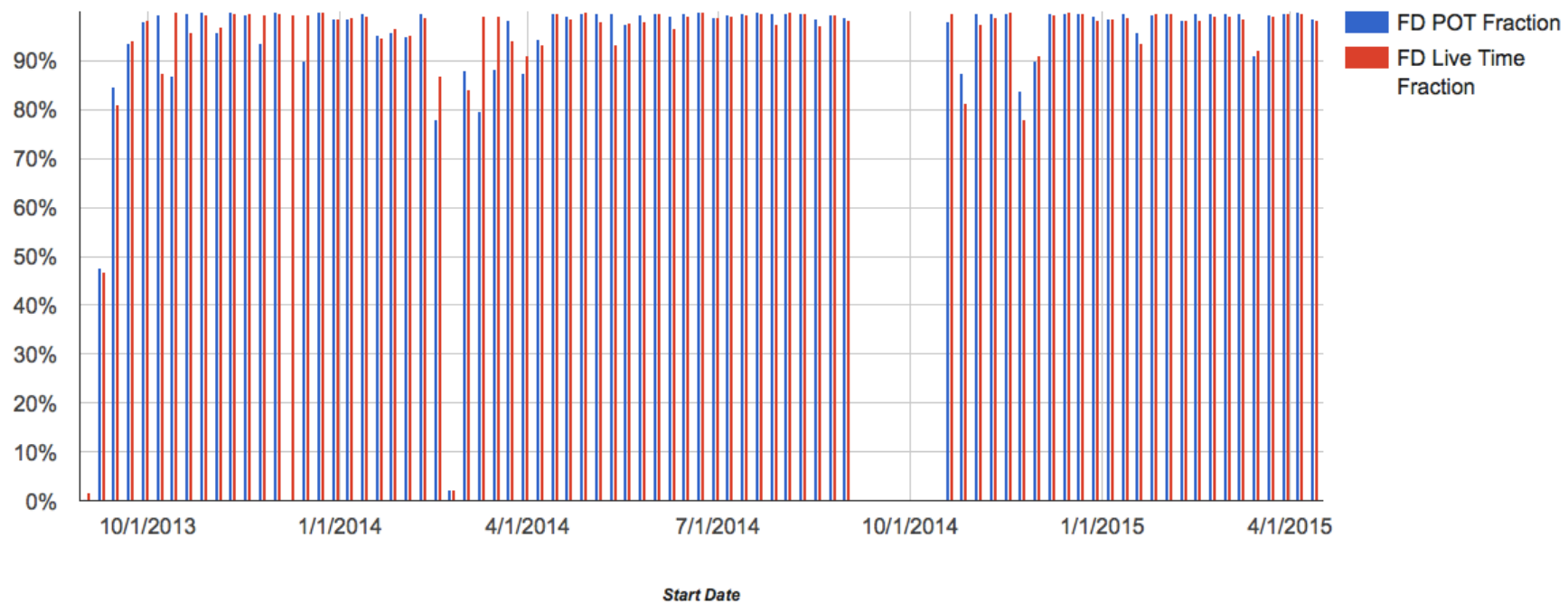


**ND POT fraction and Live Time Fraction**



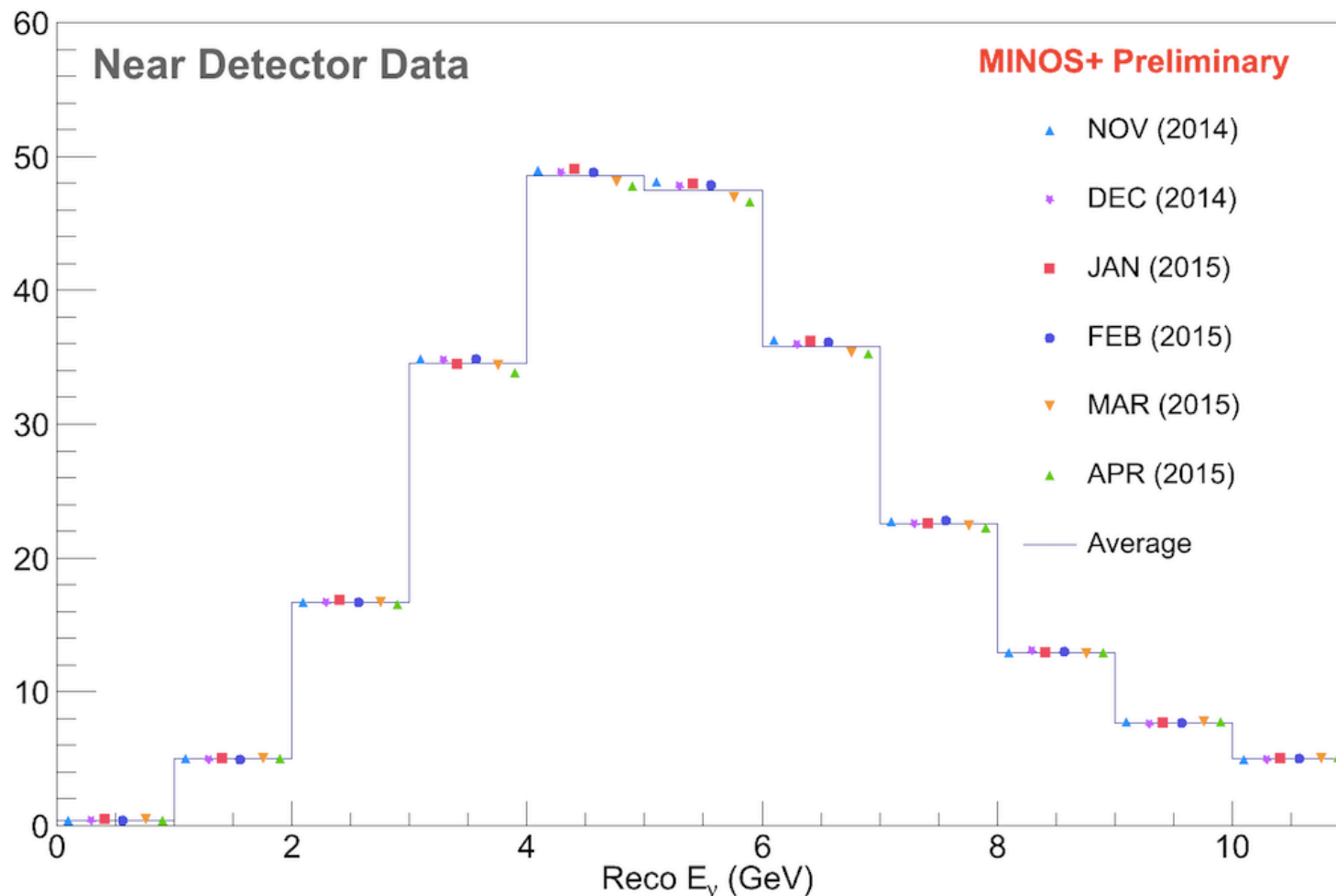


**FD POT Fraction and Live Time Fraction**





## Neutrino Energy Spectrum Stability (PQ and NQ)





## Energy Stability Spectrum Stability

Preliminary analysis shows that:

- The effect (loss of event count in the peak region) is **ONLY** visible in the two large (slip-stacked) batches
- There seem to be **NO** time dependence ( which rules out a target degradation ):
  - Maybe reconstruction software issue
  - Maybe some intensity dependence non-linear effects in target
- Work is in progress